Cement Creek HRS
Highest Background Value Selected from five Background Locations
Dissolved Metals – ug/L (ppb)

Field Sample ID: Location: Analytes	Highest Selected Background Value	UASW003 (A68) Animas River upstream of confluence with Cement Creek	UASW005 (CC17) South Fork of Cement Creek	UASW012 North Fork of Cement Creek upstream of the Gold King 7 Level Mine	UASW030 (CC01F) Lower Ross Basin Drainage upstream of Grand Mogul Mine	UASW045 Minnesota Gulch Drainage
Dilution Factor						
Aluminum	**4280**	86.2	720	3820	69.0	**4280**
Antimony	**2.5 U**	**2.5 U**	**2.5 U**	**2.5 U**	**2.50 U**	**2.5 U**
Arsenic	**2.5 U**	**2.5 U**	**2.5 U**	**2.5 U**	**2.50 U**	**2.5 U**
Barium	**30.8**	25 U	25 U	25 U	**30.8 J**	29 J
Beryllium	**1.05**	0.5 U	0.5 U	0.595 J	0.500 U	**1.05**
Cadmium	**4.69**	1.82	2.73	**4.69**	3.09	3.79
Calcium	**162000**	54300	**162000**	52500	46200	52700
Chromium	**2.56 J**	2.5 U	2.5 U	**2.56 J**	2.50 U	2.5 U
Cobalt	**20.6**	0.5 U	7.71	7.94	0.500 U	**20.6**
Copper	**291**	2.5 U	8.83	**291**	25.2	150
Iron	**3230**	100 U	**3230**	100 U	100 U	268
Lead	**9.44**	0.79 J	0.643 J	4.50	0.620 J	**9.44**
Magnesium	**9690**	3290	8230	7230	4060	**9690**
Manganese	**1940**	**1940**	1840	742	120	1620
Molybdenum	**3.63**	**3.63**	0.535 J	0.5 U	0.500 U	0.5 U
Nickel	**13.6**	2.5 U	2.5 U	5.44	2.50 U	**13.6**
Potassium	**747 J**	614 J	**747 J**	545 J	294 J	714 J
Selenium	**2.5 U**	2.5 U	2.5 U	**2.5 U**	2.50 U	2.5 U
Silver	**0.843 J**	**0.843 J**	0.5 U	.50 U	0.500 U	0.5 U
Sodium	**3470**	2460	**3470**	2040	1230	1620
Thallium	**15.4**	**15.4**	2.5 U	5.00 U	2.50 U	2.5 U
Vanadium	**5.0 U**	**5.0 U**	**5.0 U**	1.00 U	**5.00 U**	**5.0 U**
Zinc	**924**	449	647	**924**	556	907

J The associated numerical value is an estimated quantity because quality control criteria were not met. Presence of the analyte is reliable.
U The analyte was not detected above the CRQL.
µg/L micrograms per liter
BOLD Background value

Sources: EPA 2008 (CLP limits); EPA 2004 (SCDM); EPA 2008 (Low Concentration Detection Limits)

Cement Creek HRS
Potential Sources of Contamination
Dissolved Metals – ug/L (ppb)

Field Sample ID: Location: Analytes	Upper Gold King 7 Mine adit discharge UAAD002 (CC06)	Red and Bonita Mine adit discharge UAAD003 (CC03C)	Mogul Mine adit discharge UAAD004 (CC02D)	Mogul Mine North UAUSW022 (CC02A)	Grand Mogul Mine UASW059	Queen Anne Mine UASW024 (CC01S)	Columbia Mine no sample	Adelphin Mine no sample	American Tunnel discharge at portal UAAD001 (CC19)
Aluminum	18,300	4620	3300	1430	13200	2180	-	-	4990
Antimony	5 U	5 U	2.5 U	2.5 U	2.50 U	2.5 U	-	-	5 U
Arsenic	5 U	5 U	2.72 J	2.5 U	26.9	2.5 U	-	-	5 U
Barium	50 U	50 U	25 U	39.4 J	25.0 U	34.7 J	-	-	50 U
Beryllium	5.98	6.45	4.49	0.5 U	0.940 J	0.968 J	-	-	3.7
Cadmium	53	48.7	50.9	10.9	105	16.9	-	-	3.02
Calcium	395000	442000	211,000	62000	17400	72,700	-	-	434000
Chromium	5 U	5 U	2.5 U	2.5 U	5.46	2.5 U	-	-	5 U
Cobalt	84.4	102	22.5	0.5 U	25.6	0.5 U	-	-	136
Copper	4210	5 U	20.9	22.3	4690	36.6	-	-	5 U
Iron	71600	101000	27200	100 U	46400	100 U	-	-	133000
Lead	5.66	98.7	255	2.54	33.8	2.21	-	-	1.12 J
Magnesium	22600	28600	13200	8310	12000	9760	-	-	29900
Manganese	27800	30500	29100	111	8740	977	-	-	41700
Molybdenum	1 UJ	1.54 J	1.99 J	0.5 U	0.500 U	0.5 U	-	-	
Nickel	35.4	42.6	8.3	9.47	16.4	12.1	-	-	47.8
Potassium	1790	1840	2000	634 J	362 J	561 J	-	-	1680
Selenium	5 U	5 U	2.5 U	2.5 U	2.50 U	2.5 U	-	-	5 U
Silver	1 U	1 U	0.5 U	0.5 U	0.500 U	0.5 U	-	-	1 U
Sodium	5260	8530	6210	1260	626	1340	-	-	9080
Thallium	5 U	5 U	2.5 U	2.5 U	2.50 U	2.5 U	-	-	5 U
Vanadium	10 U	10 U	5 U	5 U	5.00 U	5 U	-	-	10 U
Zinc	18,600	15400	32700	3080	24900	3230	-	-	18100

J The associated numerical value is an estimated quantity because quality control criteria were not met. Presence of the analyte is reliable.

U The analyte was not detected above the CRQL.

µg/L micrograms per liter

TABLE A
Surface Water Dissolved Metals Analytical Summary
Concentrations in micrograms per liter (µg/L) parts per billion (ppb)

Field Sample ID: / Location: / Analytes	Highest Selected Background Value	UASW030 (CC01F) Lower Ross Basin Drainage upstream of Grand Mogul Mine (1 of 5 Backgrounds)	UASW059 Cement Creek at the toe of Grand Mogul Mine	UASW024 (CC01S) Drainage from Queen Anne Mine-upstream of Lower Ross Basin	UASW023 (CC01T) Cement Creek upstream of Mogul North Mine & downstream of Lower Ross Basin	*UASW022 (CC02A) Mogul Mine North Discharge*	UASW021 Cement Creek downstream of Mogul North Mine	UASW020 Cement Creek upstream of Mogul Mine	UASW018 Cement Creek upstream of wetland that contains Mogul Mine drainage	*UASW019 Wetlands through which Mogul mine drains to Cement Creek*	UASW017 Cement Creek downstream of wetland that channels Mogul Mine drainage	UASW016 (OPP12) Cement Creek upstream of Red and Bonita Mine	*UASW015 CC03D Drainage from Red & Bonita Mine before the culvert under the road*	UASW014 Cement Creek downstream of Red and Bonita Mine
Aluminum	**4280**	*69.0*	13200 ★	*2180*	1580	*1430*	1520	996	2830	*10100*	2570	2480	*3040*	4980
Antimony	**2.5 U**	*2.50 U*	2.50 U	*2.5 U*	2.50 U	*2.5 U*	2.50 U	2.50 U	2.50 U	*2.5 U*	2.50 U	2.50 U	*5 U*	2.50 U
Arsenic	**2.5 U**	*2.50 U*	26.9 ★	*2.5 U*	2.50 U	*2.5 U*	2.50 U	2.50 U	2.50 U	*2.5 U*	2.50 U	2.50 U	*5 U*	2.50 U
Barium	**30.8**	*30.8 J*	25.0 U	*34.7 J*	29.1 J	*39.4 J*	26.3 J	25.0 U	25.0 U	*25 U*	25.0 U	25.0 U	*50 U*	25.0 U
Beryllium	**1.05**	*0.500 U*	0.940 J	*0.968 J*	0.500 U	*0.5 U*	0.649 J	0.500 U	0.760 J	*3.8*	1.08	0.500 U	*6.95*	3.03
Cadmium	**4.69**	*3.09*	105 ★	*16.9*	13.6	*10.9*	12.0	8.88	19.2 ★	*72.8 ★*	15.8 ★	13.7	*42.2*	25.8 ★
Calcium	**162000**	*46200*	17400	*72,700*	55400	*62000*	55900	45100	71600	*174000*	81400	87800	*450000*	231000
Chromium	**2.56 J**	*2.50 U*	5.46	*2.5 U*	2.50 U	*2.5 U*	2.50 U	2.50 U	2.50 U	*2.5 U*	2.50 U	2.50 U	*5 U*	2.50 U
Cobalt	**20.6**	*0.500 U*	25.6	*0.5 U*	0.500 U	*0.5 U*	0.500 U	0.500 U	3.02	*22.6*	2.34	1.83	*95.9*	46.0
Copper	**291**	*25.2*	4690 ★	*36.6*	102	*22.3*	105	91.1	240	*820*	201	140	*5 U*	121
Iron	**3230**	*100 U*	46400 ★	*100 U*	100 U	*100 U*	100 U	100 U	413	*4460*	186 J	210 J	*95200*	30600 ★
Lead	**9.44**	*0.620 J*	33.8 ★	*2.21*	2.03	*2.54*	2.62	4.01	11.9	*75.6*	12.6	7.42	*13.1*	16.1
Magnesium	**9690**	*4060*	12000	*9760*	7020	*8310*	7150	5520	6880	*13600*	6280	6010	*28900*	15700
Manganese	**1940**	*120*	8740 ★	*977*	633	*111*	550	306	4040	*21900*	3370	3000	*31900*	14900 ★
Molybdenum	**3.63**	*0.500 U*	0.500 U	*0.5 U*	0.500 U	*0.5 U*	0.500 U	0.500 U	0.500 U	*0.5 U*	0.500 U	0.500 U	*1 U*	0.500 U
Nickel	**13.6**	*2.50 U*	16.4	*12.1*	6.06	*9.47*	6.43	4.42 J	5.71	*13.6*	4.23 J	3.23 J	*38.6*	20.2
Potassium	**747 J**	*294 J*	362 J	*561 J*	250 J	*634 J*	517 J	462 J	593 J	*1420*	568 J	532 J	*1850*	920 J
Selenium	**2.5 U**	*2.50 U*	2.50 U	*2.5 U*	2.50 U	*2.5 U*	2.50 U	2.50 U	2.50 U	*2.5 U*	2.50 U	2.50 U	*5 U*	2.50 U
Silver	**0.843 J**	*0.500 U*	0.500 U	*0.5 U*	0.500 U	*0.5 U*	0.500 U	0.500 U	0.500 U	*0.5 U*	0.500 U	0.500 U	*1 U*	0.500 U
Sodium	**3470**	*1230*	626	*1340*	1280	*1260*	1260	1150	2190	*5520*	2610	2890	*8800*	5430
Thallium	**15.4**	*2.50 U*	2.50 U	*2.5 U*	2.50 U	*2.5 U*	2.50 U	2.50 U	2.50 U	*2.5 U*	2.50 U	2.50 U	*5 U*	2.50 U
Vanadium	**5.0 U**	*5.00 U*	5.00 U	*5 U*	5.00 U	*5 U*	5.00 U	5.00 U	5.00 U	*5 U*	5.00 U	5.00 U	*10 U*	5.00 U
Zinc	**924**	*556*	24900 ★	*3230*	2750	*3080*	2550	1920	5950 ★	*27,600 ★*	4910 ★	4640 ★	*15,500*	8770 ★

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U The analyte was not detected above the CRQL.
µg/L micrograms per liter
BOLD Background value
★ Elevated Concentration (concentration is > 3X background)

Sources: EPA 2008 (CLP limits); EPA 2004 (SCDM); EPA 2008 (Low Concentration Detection Limits)

TDD

TABLE A - continued
Surface Water Dissolved Metals Analytical Summary
Concentrations in micrograms per liter (µg/L) parts per billion (ppb)

Sample ID: Location: / Analytes	Highest Selected Background Value	UASW013 Cement Creek upstream of the confluence with the North Fork of Cement Creek	UASW012 North Fork of Cement Creek upstream of Gold King 7 Level Mine (1 of 5 backgrounds)	UASW011 North Fork of Cement Creek downstream of Gold King 7 Level Mine	UASW010 North Fork of Cement Creek upstream of confluence with Cement Creek	UASW009 Cement Creek downstream of the confluence with the North Fork of Cement Creek	UASW008 Cement Creek upstream of the American Tunnel	*UASW007 (CC18) Discharge from American Tunnel immediately above confluence with Cement Creek*	UASW006 Cement Creek downstream of the American Tunnel and upstream of the confluence with the South Fork of Cement Creek	*UASW005 (CC17) South Fork of Cement Creek* (1 of 5 backgrounds)	UASW004 Cement Creek downstream of confluence with the South Fork of Cement Creek	UASW058 Cement Creek upstream of the confluence with Dry Gulch drainage	UASW056 Cement Creek downstream of the Dry Gulch drainage
Dilution Factor													
Aluminum	**4280**	3550	3820	18100 ★	23500	7030	7940	*5730*	9160	*720*	5130	5510 ★	5440
Antimony	**2.5 U**	2.50 U	2.5 U	5 U	5 U	2.50 U	2.50 U	*5 U*	2.50 U	*2.5 U*	2.50 U	2.50 U	2.50 U
Arsenic	**2.5 U**	2.50 U	2.5 U	5 U	5 U	2.50 U	2.50 U	*5 U*	2.50 U	*2.5 U*	2.50 U	2.50 U	2.50 U
Barium	**30.8**	25.0 U	25U	50 U	50 U	25.0 U	25.0 U	*50 U*	25.0 U	*25 U*	25.0 U	25.0 U	25.0 U
Beryllium	**1.05**	2.73	0.595 J	7.06 ★	6.34 ★	3.57 ☆	2.88	*3.54*	3.61 ☆	*0.5 U*	2.28	1.52	1.75
Cadmium	**4.69**	22.0 ★	4.69	53.3 ★	63.7 ★	29.1 ★	28.7 ★	*2.54*	30.3 ★	*2.73*	16.1 ★	13.7	12.7
Calcium	**162000**	210000	52500	388000	348000	230000	238000	*450000*	258000	*162000*	202000	182000	178000
Chromium	**2.56 J**	2.50 U	2.56 J	5 U	5 U	2.50 U	2.50 U	*5 U*	2.50 U	*2.5 U*	2.50 U	2.50 U	2.50 U
Cobalt	**20.6**	36.3	7.94	81.4 ★	83.1 ★	49.2	46.6	*136*	59.4	*7.71*	33.0	30.4	30.4
Copper	**291**	128	291	4580 ★	4230 ★	909 ★	884 ★	*5 U*	796	*8.83*	398	366	355
Iron	**3230**	27700 ★	100 U	66700 ★	52900 ★	31400 ★	30000 ★	*131000*	32500 ★	*3230*	16200 ★	15900 ★	16000 ★
Lead	**9.44**	13.3	4.5	5.66	5.93	14.6	19.3	*1.52 J*	44.8 ★	*0.643 J*	25.0	27.9	26.8
Magnesium	**9690**	14000	7230	22300	24800	15600	16100	*31400*	18200	*8230*	13100	12600	12200
Manganese	**1940**	12800 ★	742	26000 ★	23700 ★	14800 ★	14800 ★	*43000*	18500 ★	*1840*	10100 ★	9150 ★	8750 ★
Molybdenum	**3.63**	0.500 U	0.5 U	1 U	1 U	0.500 U	0.500 U	*1 U*	0.500 U	*0.535 J*	0.500 U	0.500 U	0.500 U
Nickel	**13.6**	16.3	5.44	35.8	39.3	328 ★	20.8	*46.9*	24.8	*2.5 U*	14.7	12.6	12.2
Potassium	**747 J**	874 J	545 J	1790	1430	899 J	926 J	*1740*	987 J	*747 J*	933 J	1070	1100
Selenium	**2.5 U**	2.50 U	2.5 U	5 U	5 U	2.50 U	2.50 U	*5 U*	2.50 U	*2.5 U*	2.50 U	2.50 U	2.50 U
Silver	**0.843 J**	0.500 U	0.5 U	1 U	1 U	0.500 U	0.500 U	*1 U*	0.500 U	*0.5 U*	0.500 U	0.500 U	0.500 U
Sodium	**3470**	4980	2040	5240	5140	4820 ★	5100 ★	*9500*	5630 ★	*3470*	4480 ★	4370 ★	4280 ★
Thallium	**15.4**	2.50 U	2.5 U	5 U	5 U	2.50 U	2.50 U	*5 U*	2.50 U	*2.5 U*	2.50 U	2.50 U	2.50 U
Vanadium	**5.0 U**	5.00 U	5 U	10 U	10 U	5.00 U	5.00 U	*10 U*	5.00 U	*5 U*	5.00 U	5.00 U	5.00 U
Zinc	**924**	7890 ★	924	17100 ★	16200 ★	9350 ★	9230 ★	*18800*	10700 ★	*647*	5510 ★	5130 ★	4850 ★

J The associated numerical value is an estimated quantity because quality control criteria were not met. Presence of the analyte is reliable.
U The analyte was not detected above the CRQL.
µg/L micrograms per liter
BOLD Background value
★ Elevated Concentration (concentration is > 3X background)

Sources: EPA 2008 (CLP limits); EPA 2004 (SCDM); EPA 2008 (Low Concentration Detection Limits)
TDD

TABLE A - continued
Surface Water Dissolved Metals Analytical Summary
Concentrations in micrograms per liter (µg/L) parts per billion (ppb)

Sample ID: Location: / Analytes	Highest Selected Background Value	*UASW054 Prospect Gulch drainage*	UASW050 Cement Creek downstream of the Mammoth Tunnel	UASW049 Cement Creek upstream of the confluence with Fairview Gulch and the Elk Tunnel discharge	UASW047 Cement Creek downstream of the Elk Tunnel and Fairview Gulch	UASW046 Cement Creek upstream of the confluence with Minnesota Gulch drainage	*UASW045Minnesota Gulch drainage 1 of 5 backgrounds)*	UASW044 Cement Creek upstream of the Anglo Saxon Mine and downstream of Minnesota Gulch drainage	*UASW043 Anglo Saxon Mine drainage*	UASW042 Cement Creek downstream of the Anglo Saxon Mine drainage	UASW041 Cement Creek upstream of the confluence with Ohio Gulch drainage	*UASW040 Ohio Gulch drainage*
Dilution Factor												
Aluminum	**4280**	*14400*	8830	8900	8450	8340	*4280*	8150	*225*	7870	8090	*17100*
Antimony	**2.5 U**	*2.5 U*	2.50 U	2.50 U	2.50 U	2.50 U	*2.5 U*	2.50 U	*5 U*	2.50 U	2.50 U	*2.5 U*
Arsenic	**2.5 U**	*17*	4.63 J	5.00 J	3.51 J	2.50 U	*2.5 U*	2.50 U	*5 U*	2.50 U	2.50 U	*2.5 U*
Barium	**30.8**	*25 U*	25.0 U	25.0 U	25.0 U	25.0 U	*29 J*	25.0 U	*50 U*	25.0 U	25.0 U	*25 U*
Beryllium	**1.05**	*0.726 J*	1.50	1.27	1.44	1.52	*1.05*	1.32	*1.31 J*	1.36	1.58	*1.72*
Cadmium	**4.69**	*5.33*	9.70	9.51	8.99	8.60	*3.79*	9.09	*2.1*	8.14	8.71	*4.41*
Calcium	**162000**	*35400*	169000	171000	170000	170000	*52700*	167000	*304000*	175000	171000	*57800*
Chromium	**2.56 J**	*2.5 U*	2.50 U	2.50 U	2.50 U	2.50 U	*2.5 U*	2.50 U	*5 U*	2.50 U	2.50 U	*2.5 U*
Cobalt	**20.6**	*26.1*	28.7	29.8	29.4	28.2	*20.6*	28.9	*34.9*	25.6	26.7	*59.1*
Copper	**291**	*190*	235	239	225	212	*150*	212	*5 U*	191	184	*229*
Iron	**3230**	*27600*	23900 ★	24100 ★	21800 ★	20000 ★	*2.68*	18200 ★	*19300*	17100 ★	17200 ★	*32700*
Lead	**9.44**	*57.3*	25.3	25.4	24.7	24.8	*9.44*	26.0	*1 U*	24.1	24.5	*95.6*
Magnesium	**9690**	*7560*	11700	11800	11400	11300	*9690*	11200	*18900*	11600	11300	*12600*
Manganese	**1940**	*826*	6240 ★	6180 ★	5860 ★	5780	*1620*	5750	*8020*	5900 ★	5710	*5010*
Molybdenum	**3.63**	*0.5 U*	0.500 U	0.500 U	0.500 U	0.500 U	*0.5U*	0.500 U	*1 U*	0.500 U	0.500 U	*0.5 U*
Nickel	**13.6**	*19.6*	15.2	15.3	14.4	13.2	*13.6*	14.9	*5 U*	12.2	12.9	*33.2*
Potassium	**747 J**	*2130*	1700	1720	1680	1660	*714 J*	1650	*2450*	1650	1680	*1300*
Selenium	**2.5 U**	*2.5 U*	2.50 U	2.50 U	2.50 U	2.50 U	*2.5 U*	2.50 U	*5 U*	2.50 U	2.50 U	*2.5 U*
Silver	**0.843 J**	*0.5 U*	0.500 U	0.500 U	0.500 U	0.500 U	*0.5 U*	0.500 U	*1 U*	0.500 U	0.500 U	*0.5 U*
Sodium	**3470**	*1230*	3810 ★	3870	3990	4030	*1620*	4030	*9620*	4280	4150	*2180*
Thallium	**15.4**	*2.5 U*	2.50 U	2.50 U	2.50 U	2.50 U	*2.5 U*	2.50 U	*5 U*	2.50 U	2.50 U	*2.5 U*
Vanadium	**5.0 U**	*5 U*	5.00 U	5.00 U	5.00 U	5.00 U	*5 U*	5.00 U	*10 U*	5.00 U	5.00 U	*5 U*
Zinc	**924**	*1350*	3560 ★	3510 ★	3320 ★	3230 ★	*907*	3210 ★	*2450*	3160 ★	3090 ★	*1070*

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U The analyte was not detected above the CRQL.
µg/L micrograms per Liter
BOLD Background value
★ Elevated Concentration (concentration is > 3X background)

Sources: EPA 2008 (CLP limits); EPA 2004 (SCDM); EPA 2008 (Low Concentration Detection Limits)

TDD

TABLE A - continued
Surface Water Dissolved Metals Analytical Summary
Concentrations in micrograms per liter (µg/L) parts per billion (ppb)

Sample ID: / Location: / Analytes	Highest Selected Background Value	UASW039 Cement Creek upstream of the Illinois Gulch drainage and downstream of Ohio Gulch drainage	UASW037 Cement Creek downstream of the Illinois Gulch drainage	UASW036 Cement Creek upstream of the Kendrick-Gelder Smelter	UASW035 (CCS*) Cement Creek downstream of the Kendrick-Gelder Smelter	UASW02 Cement Creek immediately upstream of the confluence with the Animas River	*UASW003 (A68) Animas River upstream of confluence with Cement Creek (1 of 5 backgrounds)*	UASW01 Animas River Downstream of confluence with Cement Creek	UASW34 Animas River upstream of confluence with Mineral Creek	*UASW033 (M34) Mineral Creek upstream of confluence with the Animas river*	UASW32 Animas River downstream of confluence with Mineral Creek	UASW29 (A72) Animas River most downstream sample location
Dilution Factor												
Aluminum	**4280**	8320	7580	7800	7890	7810	*86.2*	7330	530	*381*	275	1300
Antimony	**2.5 U**	2.50 U	2.50 U	2.50 U	2.50 U	2.50 U	*2.5 U*	2.50 U	2.50 U	2.50 U	2.50 U	2.50 U
Arsenic	**2.5 U**	2.50 U	2.50 U	2.50 U	2.50 U	2.50 U	*2.5 U*	2.50 U	2.50 U	2.50 U	2.50 U	2.50 U
Barium	**30.8**	25.0 U	25.0 U	25.0 U	25.0 U	25.0 U	*25 U*	25.0 U	25.0 U	25.0 U	25.0 U	25.0 U
Beryllium	**1.05**	0.925 J	0.986 J	0.910 J	1.14	0.826 J	*0.5 U*	1.17	0.5 U	0.5 U	0.5 U	0.5 U
Cadmium	**4.69**	7.47	7.38	5.87	6.57	6.55	*1.82*	6.19	2.96	*0.926 J*	1.76	0.653 J
Calcium	**162000**	165000	172000	171000	177000	175000	*54300*	169000	91000	*57500*	76900	87500
Chromium	**2.56 J**	2.50 U	2.50 U	2.50 U	2.50 U	2.5 U	*2.5 U*	2.50 U	2.5 U	*2.5 U*	2.50 U	2.50 U
Cobalt	**20.6**	27.3	24.7	23.5	22.3	23.7	*0.5 U*	20.4	7.33	*3.75*	6.34	3.84
Copper	**291**	184	175	146	147	148	*2.5 U*	121	26.1	*2.5 U*	13.9	2.50 U
Iron	**3230**	17600 ★	14800 ★	12200 ★	12000 ★	11500 ★	*100 U*	10,800 ★	1980	*2800*	2630	8140
Lead	**9.44**	25.7	22.4	18.9	17.4	17.8	*0.79 J*			*1.23*	0.5 U	
Magnesium	**9690**	11300	10900	10600	10900	10,900	*3290*	10400	5630	*4860*	5720	7330
Manganese	**1940**	5610	5280	4390	4580	4,650	*1940*	4760	2560	*327*	1270	796
Molybdenum	**3.63**	0.500 U	0.557 J	0.900 U	0.500 U	1.04 J	*3.63*	0.500 U	0.67 J	*0.5 U*	0.500U	0.500 U
Nickel	**13.6**	12.7	11.5	11.7	11.0	10.6	*2.5 U*	8.46	2.96 J	*2.5 U*	2.50 U	2.50 U
Potassium	**747 J**	1680	1580	1780	1840	1790	*614 J*	1700	1010	*629 J*	856 J	1620
Selenium	**2.5 U**	2.50 U	2.50 U	2.50 U	2.50 U	2.50	*2.5 U*	2.50 U	2.50 U	*2.5 U*	2.50 U	2.5 U
Silver	**0.843 J**	0.500 U	0.500 U	0.891 J	0.500 U	0.953 J	*0.843 J*	0.5 U	0.500 U	*0.5 U*	0.500 U	0.500 U
Sodium	**3470**	4090	4310	4460	4550	4540	*2460*	4450	3150	*3300*	3570	5580
Thallium	**15.4**	2.77 J	4.02 J	6.35	2.50 U	5.61	*15.4*	2.50 U	2.50 U	*2.5 U*	2.50 U	2.50 U
Vanadium	**5.0 U**	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	*5 U*	5.00 U	5.00 U	*5 U*	5.00 U	5.00 U
Zinc	**924**	3000 ★	2800 ★	2260	2340	2370	*449*	2410	1030	*185*	558	94.6

J The associated numerical value is an estimated quantity because quality control criteria were not met. Presence of the analyte is reliable.
U The analyte was not detected above the CRQL.
µg/L micrograms per liter
BOLD Background value
★ Elevated Concentration (concentration is > 3X background)

Sources: EPA 2008 (CLP limits); EPA 2004 (SCDM); EPA 2008 (Low Concentration Detection Limits)

TDD